Attachment 1

Department of Resources Recycling & Recovery

SCOPE OF WORK
Used Oil Lifecycle Assessment Practitioner

I. INTRODUCTION/OBJECTIVES

As part of Senate Bill (SB) 546 of 2009, CalRecycle was directed to 1) contract with a third-party consultant with recognized expertise in life cycle assessments (LCA) to coordinate a comprehensive life cycle analysis of the used lubricating and industrial oil management process, from generation through collection, transportation, and re-use alternatives; 2) solicit input from representatives of all used oil stakeholders in defining the scope and design of the LCA; 3) evaluate the impacts of certain components of SB 546; and 4) submit a report to the Legislature on the results and any recommendations for statutory changes necessary to promote increased collection and responsible management of used oil. Public Resources Code (PRC) § 48651.5(b). This Scope of Work (SOW) sets out the tasks to be undertaken by the LCA Practitioner (also referred to herein as Contractor) to develop, implement and report on the LCA. The products from this SOW will provide CalRecycle with the materials necessary to develop the Legislative Report mandated by PRC § 48651.5(b)(1)(D).

There will be four contractors assigned to this project:

1. Expert Facilitator
2. LCA Practitioner
3. ISO Critical Review Contractor
4. Economic Study Contractor

These contractors and the CalRecycle Project Team, which includes the CalRecycle Contract Manager (Contract Manager), comprise the LCA Project Team.

II. WORK TO BE PERFORMED

This Project will be performed in coordination and conjunction with the used oil economic study in an iterative process in order to create a Final Report that is meaningful, coordinated and integrated.

The Contractor shall develop and conduct the LCA study and prepare the LCA Study Report (Report). The Report shall be in conformance with ISO standards (14040 and 14044) in consultation with the ISO Critical Review Contractor and in conformance with the study design of the Economic analysis to be prepared by the Economic Study Contractor.

III. TASKS IDENTIFIED

All deliverables are subject to the Contract Manager's written approval. Contractor's and subcontractor's attendance at meetings and participation in conference calls will be as determined by Contract Manager.

Task 1. Provide Technical Assistance to CalRecycle.
The following subtasks are designed to assist CalRecycle comply with PRC § 48651.5(b)(1)(B): CalRecycle will host an initial series of facilitated stakeholder and workgroup meetings to provide input and data for the development of the scope and design of the LCA. Participants in the stakeholder meetings will include the Contractor and the other members of the LCA Project Team and a broad and diverse stakeholder group. At the conclusion of these meetings, the Expert Facilitator will summarize the resultant LCA scope and design and describe the goal definition, study boundaries, life-cycle inventory and impact assessment methods for inclusion in the Stakeholder Project Recommendations Report. This Report and additional input and data obtained as a result of Tasks set forth below will form the basis on which the Contractor shall develop and conduct the LCA and the prepare the LCA study report

Task 1a. Project coordination.

Task 1a.i. Identify and contract with an Economic Expert subcontractor.
Contractor shall secure an Economic Expert subcontractor, subject to Contract Manager approval, to provide throughout the duration of this project economic expertise, guidance and coordination services for Contractor to ensure conformance with the study design of the economic analysis.

The Economic Expert subcontractor shall attend stakeholder meetings; make recommendations regarding the scope of work for the Economic Study Contractor; review all economic data; make recommendations regarding data gaps/needs; assist in the coordination of LCA-related data and economic data collection (discussed below); review reports from the Economic Study Contractor; assist in the development of the Work Plan (discussed below); and assist in the development of the draft and final LCA reports (discussed below).

Timeline: Contractor shall contract with the Economic Expert subcontractor by July 2011.

Task 1a.ii. Prepare Project Work Plan. The Contractor shall develop a detailed Project Work Plan based on discussions with the CalRecycle LEA Team and input from the stakeholders.

The Project Work Plan will address project objectives, timelines, and implementation of tasks, activities, and deliverables, and other relevant issues, including but not limited to, functional units, boundaries, processes, interpretation methodologies, and impact assessments.

Deliverable: Work Plan.

Timeline: Expected to be completed by August 2011.

Task 1a.iii. Meet with LCA Project Team and CalRecycle Project Team. To ensure that the LCA study is conducted in the most efficient and effective manner, the Contractor shall participate as needed in discussions with the LCA Project Team, and shall meet with the CalRecycle Project Team after each stakeholder meeting.

Task: Contractor shall attend and participate in up to 8 2-hour touch-base meetings.

Timeline: These meetings are expected to be completed by the last CalRecycle Public meeting (approximately December 2012).

Task 1b. Participate in stakeholder/public meetings and calls. Due to the fact that a stakeholder group will be guiding the scope and design of the LCA study**,** the Contractor shall attend and participate in stakeholder and public meetings and shall participate in subgroup conference calls.

Task: Contractor shall attend and participate in up to 8 stakeholder and/or public meetings and up to 6 subgroup conference calls as determined by the Contract Manager.

Timeline: The stakeholder meetings are expected to be completed by October 2012. The CalRecycle public meetings and conference calls are expected to be completed by December 2012.

Task 1c. Identify data needs, sources, and gaps. Particular attention will be taken by the Contractor to identify data needs and gaps as early as possible to minimize the need for primary data-gathering by the Contractor during later stages of the project.

The Contractor shall identify data needs, sources, and gaps relevant to the development and implementation of the LCA. Based on data needs, Contractor shall identify data sources, such as the National Renewable Energy Library, the US Environmental Protection Agency, other governmental agencies such as those relevant to pacific grid inventories or transportation fuels, industry publications, and public and private research materials, and literature. Contractor will present these sources for acceptability for the study during the stakeholders meetings.

Should additional primary or secondary data collection become necessary, Contractor shall supply the Contract Manager with the required format for such data as well as any additional required parameters for the required data.

Deliverables: Summary of data needs and gaps. Summary of data sources. As identified, a summary of additional data needs and the required format and parameters.

Timeline: The summary of data needs and gaps is expected to be completed by July/August 2011. The summary of data sources is expected to be completed by July 2011. If required, the summary of additional data needs, format and parameters is expected to be completed by August 2011.

Task 2. Life-Cycle Assessment Study.
All contract-related information, including but not limited to, data, assumptions, algorithms, inventory information, simplifications, averages, data conglomeration, will be made available to CalRecycle (and by extension the public) to the extent allowed under the law and according to confidentiality agreements that may affect the dissemination of this information. This is to provide both transparency of the process as well as to provide interested parties with the information they might need should they wish to perform additional analyses on their own after the work performed under this contract is completed.

Task 2a. Perform data-gathering and coordination. It is likely that the Contractor will need to perform additional data-gathering in order to conduct the LCA study. Should it be determined in Task 1c that additional primary or secondary data is needed, a detailed list of data needed will be provided to the Contract Manager as well as a proposal for the methodology necessary in order to gather the data. Upon approval of the methodology and data needs by the Contract Manager, Contractor will collect (to the extent possible) all necessary data to be used in preparation of the LCA. The Contractor shall describe to the Contract Manager any data needs that it cannot meet, and describe the importance of those data needs and possible alternative means of collecting those data.

As an on-going subtask, Contractor shall coordinate its LCA-related data collection with the Economic Study Contractor's economic data collection to ensure compatibility.

Deliverables: Data gathering. If required, a list(s) of needed additional data and methodology to gather the data.

Timeline: Data gathering is expected to be completed by December 2012. List of needed additional data and methodology is expected to be completed by August 2012.

Task 2b. Conduct life-cycle assessment study. Based on the Stakeholder Project Recommendations Report, the data and input resulting from the above Tasks, including all data provided by the stakeholder group, and in conformance with the economic analysis, Contractor shall inform the development and implementation of the LCA while ensuring that ISO standards (14040 and 14044) are followed.

The LCA study will consist of the following four phases: the goal and scope definition, inventory analysis, impact assessment, and interpretation. The Contractor shall prepare and submit draft and final LCA study reports (see Task 3b). Final decisions about the scope and design will be made by the Contract Manager. Part of this study will include an assessment of current conditions in California related to used oil management that will be used to compare alternate scenarios of managing used oil. The alternate scenarios will be developed in consultation with the Contract Manager with input from the stakeholder group. Additionally, impact assessment will be discussed with the Contract Manager with input from the stakeholder group.

Any assumptions or simplifications that Contractor intends to use in the execution of this study will be discussed with and approved by the Project Manager.

The Contractor shall not make any assumptions as to the "best" or most "environmentally preferable" option for used oil management and shall evaluate all appropriate options without bias or predetermined notions as to the outcome of that evaluation.

Deliverables: Draft and final LCA study (for inclusion in the draft and final LCA study reports (see deliverable and associated timeline under Task 3b.)

Timeline: These deliverables are expected to be completed by December 2012.

Task 3. Reporting and Presentation.

Task 3a. Quarterly progress reports. The Contractor will prepare and submit quarterly progress reports to the Contract Manager on the progress of each task.

Deliverables: Quarterly progress reports.

Timeline: These deliverables are expected to commence by September 2011 and be completed by March 2013.

Task 3b. LCA study reporting and presentation.

Task 3b.i. Draft LCA study report and presentation. The Contractor will prepare and submit a draft LCA study report, which will include interpretation of the results. This preliminary results report will be made available for review by CalRecycle Project Team, LCA Critical Review Contractor, and stakeholders, and the results (results of the LCA scope as defined as well as identified data gaps, supportable conclusions, assumptions, sensitivity analyses, and recommendations for next steps) will be presented at a facilitated stakeholder meeting for comment. CalRecycle also will post the draft report on its website for public comment. The Contractor will coordinate as appropriate with LCA Critical Review Contractor to respond to and incorporate if appropriate any comments from the Critical Review Panel and the stakeholders. The Contractor shall develop a matrix of comments and the Contractor's rationale for addressing those comments in the report. The Contractor will then revise the LCA, prepare a presentation, and present findings of the draft LCA study report to stakeholders at a stakeholder meeting .

Deliverables: Draft LCA study report. Matrix and rationale regarding comments. Revise draft. Present draft to stakeholders.

Timeline: The draft LCA study report is expected to be completed by May 2012. The Matrix and rationale is expected to be completed by June 2012. The revised draft is expected to be completed by July 2010. The presentation is expected to be completed by July 2012.

Task 3b.ii. Final LCA study report. The Contractor will prepare and submit a final LCA study report (including assumptions and sensitivity analyses) to CalRecycle. The report will be a topic of discussion at a CalRecycle public meeting, and, although comments will be invited and noted, the Contractor is not expected to further modify the report based on the comments from this public meeting. The Contractor is expected to attend the CalRecycle public meeting (as mentioned in Task 1a.) for the purpose of responding to questions on the LCA study from CalRecycle management or the public.

Deliverables: Final LCA study report, formatted according to Section VI., below, and participation in the CalRecycle public meeting at the conclusion of the LCA.

Timeline: The final LCA study report is expected to be completed by October 2012. The CalRecycle public meeting is expected to be held in December 2012.

IV. CONTRACT/TASK TIME FRAME

Task	Begin (approx)	End (approx)
1. Provide Technical Assistance to CalRecycle		
1a. Project coordination		
1a.i. Prepare work plan	June 2011	July 2011
1a.ii. Convene with project team	June 2011	December 2012
1b. Participate in stakeholder meetings	June 2011	December 2012
1c. Identify data needs and data gaps	June 2011	August 2011
2. Life-Cycle Assessment Study		
2a. Perform data-gathering	June 2011	December 2012
2b. Conduct LCA study	June 2011	December 2012
3. Reporting and Presentation		
3a. Quarterly progress reports	June 2011	March 2013
3b. LCA study reporting and presentation		
3b.i. Draft LCA study report and presentation	June 2011	July 2012
3b.ii. Final LCA study report and participation in CalRecycle public meeting	June 2011	October 2012 & December 2012, respectively